ABSTRACT

Disclosed is a spatial image information method and system for rapid and efficient

storage in a relation type database and retrieval and management of spatial images acquired

by a combined system of a global positioning system (GPS), an inertial navigation system

5   (INS), and an image acquisition device (i.e., CCD camera). The spatial image acquired by the

GPS/INS/CCD camera combined system is combined with an exterior orientation composed

of a camera position (x,y,z), accelerated velocity, slope and direction at the moment the image

is acquired and an interior orientation acquired by a camera calibration, so that calculation of

a specified spatial coordinate information becomes possible. The spatial image information

10   system includes a section for efficiently storing a chain of still spatial image sequences

acquired by the GPS/INS/CCD camera combined system, the exterior orientation, and the

interior orientation in the relation type database, a section for storing spatial information

recognized as the same object by a user as maintaining the relationship with the stored still

spatial image sequences, a section for efficiently retrieving images that satisfy a certain spatial

15   information operation from the still spatial image sequences, and an interface section for

external systems.